

**The Economic Effects on Michigan of the
Ironwood Plastics New Manufacturing Facility**

Prepared by the Michigan Economic Development Corporation utilizing Regional
Economic Models, Incorporated (REMI) software.

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Abstract

Ironwood Plastics is considering building a new manufacturing facility in Hancock, Michigan. This facility would manufacture products for the automotive, electrical connector and defense industries. The new facility would employ up to 96 people by the end of 2009. We estimate that by 2017, this location will have generated a total of 146 jobs in the state. Total state government revenues through 2017, net of MEGA costs and adjusted for inflation, would increase by \$6.8 million (2003 dollars) due to the location of the new Ironwood Plastics manufacturing facility.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Ironwood Plastics locating a manufacturing facility in Hancock. Investment activity would take place between 2003 and 2004 with an investment of \$9 million. The facility would employ 96 people and would be at full production by 2009.

The estimates of the benefits attributable to the project include the total number of jobs created in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue. Benefits net of the MEGA incentive package, from 2003 to 2017, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2005 to 2014, 75 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the year 2015, 50 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the year 2016, and 25 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the year 2017.

The total employment effects, reported in the first line of the table, include the direct jobs created at the facility itself plus spin-off jobs. The spin-off jobs are created from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. In 2009, the first year of full operations, an additional 154 jobs are generated in the state. The total number of jobs (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 1.19 over the period 2003 to 2017. Sectoral detail on the employment is also shown in the table.

Personal income is shown in the next section of the table. Personal income is defined as the income of Michigan residents from all sources, after deduction of contributions to social insurance programs but before deduction of income tax and other personal taxes. As shown in the table, if Ironwood Plastics were to locate in Michigan under the incentive program, state personal income in 2009 would be higher by \$8.9 million (in current dollars) than it would be without the facility, and in 2017, it would be \$13.5 million higher. Adjusted for inflation, these numbers in 2003 dollars would be \$7.9 million in 2009 and \$9.9 million in 2017.

The gain in economic activity results in higher government revenues. We estimate that in 2010, the first year of full operations without investment activity, the facility would generate \$754,000 in additional gross state revenue, and that the MEGA package would provide a \$83,000 incentive to Ironwood Plastics. Thus, the new Ironwood Plastics facility would increase state revenues in 2010 by \$671,000, net of MEGA costs.

Over the period 2003 to 2017 state government revenue is projected to increase by \$9.1 million (in current dollars) due to the new Ironwood Plastics facility. The MEGA incentive package for Ironwood Plastics is forecast to cost \$831,000 over the period, resulting in a net increase in state government revenue of \$8.3 million. Adjusted for inflation, the total net increase in state government revenue from 2003 to 2017 would be \$6.8 million in 2003 dollars. These calculations do not include any revenue losses due to the property tax abatement or the investment tax credit. If the costs of the abatement and the tax credit were included, the net revenue gain to state government would be slightly less.

None of the estimates include the nonmeasurable effects that would produce additional economic and fiscal benefits for Michigan, such as the intangible advantages of influencing other location and expansion decisions.

**Ironwood Plastics, Inc.
Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package**

Economic/Fiscal Indicator	2004	2005	2006	2007	2008	2009	2010	2015	2016	2017	Total
Total Employment	6	48	60	72	79	154	149	147	146	146	
Manufacturing	0	23	29	36	40	76	75	75	75	75	
Non-Manufacturing	6	25	31	36	39	78	74	72	71	71	
Retail Trade	1	7	8	10	10	21	20	20	19	19	
Services	1	10	13	15	16	33	31	31	31	31	
Other	4	8	10	11	13	24	23	21	21	21	
In Current Dollars (Thousands):											
Personal Income	\$244	\$2,258	\$2,991	\$3,906	\$4,608	\$8,942	\$9,430	\$12,390	\$12,880	\$13,490	\$114,508
Gross State Revenue	20	181	239	312	369	715	754	991	1,030	1,079	9,159
Mega Cost	0	24	30	35	41	79	83	80	56	30	831
State Revenue Net of MEGA Cost*	\$20	\$157	\$209	\$277	\$328	\$636	\$671	\$911	\$974	\$1,049	\$8,328
Adjusted for Inflation (Thousands of 2003 Dollars):											
Personal Income	\$239	\$2,164	\$2,805	\$3,585	\$4,138	\$7,856	\$8,105	\$9,538	\$9,696	\$9,930	\$93,306
Gross State Revenue	20	173	224	286	331	628	648	763	775	794	7,461
Mega Cost	0	23	28	32	37	69	71	61	42	22	689
State Revenue Net of MEGA Cost*	\$20	\$150	\$196	\$254	\$294	\$559	\$577	\$702	\$733	\$772	\$6,772

* These estimates do not include any state government revenue losses due to the Investment Tax Credit, the Renaissance Zone Credit or the property tax abatement.

Ironwood Plastics, Inc.
Fiscal Effects on Michigan - Net Benefits with the Incentive Package
Thousands of Current Dollars

Year	Gross State Revenue	MEGA Costs	Net State Revenue
2004	20	0	20
2005	181	24	157
2006	239	30	209
2007	312	35	277
2008	369	41	328
2009	715	79	636
2010	754	83	671
2011	798	87	711
2012	842	91	751
2013	896	96	800
2014	933	101	832
2015	991	80	911
2016	1,030	56	974
2017	1,079	30	1,049